



• **POWER PV630 Photovoltaic Inverter**

- Maximum efficiency $\geq 98.7\%$.
- Permanent power 630 kVA at 50°C.
- Robustness and reliability.
- High MTBF.
- Latest MPPT technology.
- Latest generation IGBT modules ($T_j = 175^\circ\text{C}$).
- Protection devices in both AC and DC.
- Adjustable power factor (0.95 inductive - 0.95 capacitive)
- Voltage gap compensation.

General description

SUPSONIK POWER PV630 photovoltaic inverters designed for direct connection to medium voltage transformer is an efficient and robust solution in medium and large photovoltaic installations.

Thanks to the latest modulation technology, the new generation of IGBT transistors and the excellent control algorithm used, PV630 inverters generate - with a maximum performance - a perfect sine wave from direct current of solar panels. Maximum performance $\geq 98.7\%$ and European performance $\geq 98.5\%$.

It is an equipment with excellent features like full power at 50 °C, safe protection devices, high MTBF, minimal presence of harmonic distortion even at low power, etc.

POWER PV630 devices are easy to use and have intuitive software tools that allow to configure all inverter parameters as well as monitor and display them through a backlit graphic display, RS-485 communication under MODBUS RTU protocol.

Optional data logger with remote control for sending information via high speed LAN connection (TCP / IP).

The design of our machines and the process of product manufacture and quality testing guarantee our customers' maximum generation, high efficiency in the conversion of energy and compliance with the directives and standards applicable in the European Union.

SUPSONIK offers the possibility of adapting each equipment to the specific needs of the customer.

*Supsonik S.L. has a wide range of photovoltaic equipment, from **33 kVA** to **1 MVA** maximum power.*

For further information please contact the manufacturer.

PHOTOVOLTAIC DC INPUT

| | |
|-----------------------|----------------|
| Rated power | 642 kW |
| Peak power | 710 kWp |
| MPPT Voltage range | 500 V – 820 V* |
| Maximum input voltage | 1000 V |
| Maximum DC voltage | 1422 A |
| Number of DC inputs | 8 + 8 |

AC OUTPUT

| | |
|-----------------------------|----------------------------------|
| Rated power at 50°C | 630 kVA |
| Rated power at 30°C | 700 kVA |
| Rated voltage AC ± 10% | 3 x 315 V |
| Frequency | 50/60 Hz |
| Rated current | 1154 A |
| Power factor | 0.95 inductive - 0.95 capacitive |
| Maximum harmonic distortion | < 3% |

ENERGY CONSUMPTION

| | |
|-----------------------------------|----------------------|
| Internal consumption in operation | ≤ 1600 W |
| Stand-by consumption | ≤ 110 W |
| Auxiliary external power supply | 3 x 400 V, 3 x 230 V |

PERFORMANCE

| | |
|----------------------|---------|
| Maximum performance | > 98.7% |
| European performance | ≥ 98.5% |

ENVIRONMENTAL CHARACTERISTICS

| | |
|---------------------|---------------------------------|
| Protection degree | IP20 (optional IP23) |
| Working temperature | -15°C to 50°C |
| Storage temperature | -25°C to 65°C |
| Relative humidity | 15% to 95% with no condensation |
| Altitude | 1000 m. |
| Cold air | 6200 m ³ /h |

DIMENSIONS AND WEIGHT

| | |
|-------------------------------------|------------------------|
| Dimensions (Width x Depth x Height) | 3556 x 800 x 2200 (mm) |
| Weight | 2050 Kg |

PROTECTIONS

| | |
|-------------|---|
| Protections | <ul style="list-style-type: none"> • In case of grid overvoltage / undervoltage according to RD 1663/2000. • Grid overfrequency / underfrequency detection according to RD 1663/2000. • Manual network disconnection. • Against reverse polarization. • Insulation fault and DC voltage ground leakage. • Against overloads. • Against output short circuit • Against asymmetric and magnetizing currents. • Motorized isolator switch for DC side protection. • Magnetothermal switch for AC side protection. • Fuse in positive and negative for each input. • Contactor for mains isolation. • Preload contactor. |
|-------------|---|

USER INTERFACE

- OP monitoring with display.
- MODBUS, PROFIBUS, TCP / IP communications protocol via RS485 and ethernet.
- PC communications software for monitoring (graphics, alarms, modification parameters ...) RS-232.

CERTIFICATES AND STANDARDS

| | |
|---------------------------------------|---|
| EC Marking | EMC directive 61000-6-2, 61000-6-3 Low voltage directive EN 50178 |
| Compliance with Royal Decree | RD 1663/2000 |
| Declaration of conformity ENEL-DK5940 | |

* Minimum Vdc with rated Vac ± 5% and Cos (φ) = 1



